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# United States Department of Agriculture

## PRODUCTION AND MARKETING ADMINISTRATION SERVICE AND REGULATORY ANNOUNCEMENTS NO. 112<sup>1</sup>

### OFFICIAL UNITED STATES STANDARDS FOR GRADES OF SLAUGHTER CATTLE

(Title 7, Ch. I, Pt. 53, Sections 53.201-53.206 of the Code of Federal Regulations)

The following is a reprint of the official United States standards for the grades of slaughter cattle promulgated by the Secretary of Agriculture under the Agricultural Marketing Act of 1946 (60 Stat. 1087; 7 U. S. C. 1621 et seq.) and the items for Market Inspection of Farm Products and Marketing Farm Products recurring in the annual appropriation acts for the Department of Agriculture. The standards are reprinted as amended.

#### DEVELOPMENT OF THE STANDARDS

The Department of Agriculture has long recognized the importance of a uniform system of grading slaughter cattle in order to facilitate the production, marketing, and distribution of livestock and meats. The initial U. S. standards for grades of beef were formulated in 1916 when plans were made for reporting wholesale meat prices by grades. In 1918 the Department adopted a tentative schedule for market classes and grades of cattle and initiated market reporting. Tentative standards for market classes and grades of cattle were published in 1925.

The use of the tentative standards for live animals resulted in a more uniform dissemination of market information which proved to be of decided value to both cattle producers and buyers. Therefore, Official United States Standards for Grades of Slaughter Cattle were promulgated by the Secretary of Agriculture, in July 1928, and published in Service and Regulatory Announcements No. 112 (B. A. E.).

The official standards were amended in July 1939 (Amendment No. 1 to S. R. A. No. 112) so as to change the grade designation Low Cutter to Canner. A second amendment (Amendment No. 2 to S. R. A. No. 112) issued in December 1950, combined the standards for grades of slaughter steers, heifers, and cows into a single standard, specified the minimum requirements for each grade, and made such other changes in the standards as were necessary to make them coincide with the revised standards for grades of beef which became effective December 29, 1950. The grade standards applicable to slaughter steers and heifers were changed as follows: The Prime and Choice grades were combined under the designation of Prime. The Good grade designation was changed to Choice. The medium grade was divided into two grades—Good and Commercial—the Good grade including young cattle (under approximately 48 months of age) previously included in the top half of the Medium grade, and the Commercial grade including the other cattle previously included in the Medium grade. The Common grade designation was changed to Utility. The Cutter and Canner grades were not changed. The grade standards applicable to cows were changed to make possible the inclusion in each grade of all cows expected to produce the corresponding grade of beef. Grade standards for bulls and stags were relatively unchanged except for designating Medium and Common as Commercial and Utility, respectively.

<sup>1</sup> This publication was issued originally as Service and Regulatory Announcements No. 112 of the Bureau of Agricultural Economics. The work on which it is based is now a part of the Production and Marketing Administration.

## APPLICATION OF STANDARDS

The official standards for live cattle developed by the United States Department of Agriculture provide for segregation first according to use—slaughter, feeder and stocker—then as to class which is determined by sex condition, and then as to grade which is determined by the apparent relative excellence and desirability of the animal for its particular use.

### CLASSES

The classes of slaughter cattle are steers, heifers, cows, bulls, and stags. Definitions of the respective classes are as follows:

**BULL.**—A bull is an uncastrated male bovine.

**STEER.**—A steer is a male bovine castrated when young and prior to developing the secondary physical characteristics of a bull.

**STAG.**—A stag is a male bovine castrated after it has developed or begun to develop the secondary physical characteristics of a bull.

**COW.**—A cow is a female bovine that has developed, through reproduction or with age, relatively prominent hips, a large middle, and other physical characteristics typical of mature females.

**HEIFER.**—A heifer is an immature female bovine that has not developed the physical characteristics typical of cows.

### GRADE FACTORS

The specific grade of a slaughter animal is determined by an evaluation in terms of factors which influence carcass excellence—conformation, finish, quality, and maturity.

Conformation refers to the general body proportions of the animal and to the ratio of meat to bone. While primarily determined by the inherent muscular and skeletal system, it is also influenced by degree of fatness. Excellent conformation in slaughter cattle is denoted by a compact, wide topped, square rumped, and full quartered individual that is thickly fleshed. Fullness and thickness should be especially evident in the portions of the body producing the more desirable cuts of meat—loin, ribs, and rounds.

Finish refers to the fatness of the animal. The quality, quantity, and distribution of finish of the slaughter animal are very closely associated with the palatability and quality of the meat which it will produce. Thus finish becomes the most important single factor affecting the grade of slaughter cattle. External finish is evidenced by fullness and the apparent thickness of the fat covering over the back, loin, rump, ribs, and rounds. Also, fat deposits giving fullness to the brisket, rear flanks, and cod or udder, while varying decidedly with the breeding of the animal, are useful indicators of internal finish. A high degree of desirable finish is evidenced by a thick, firm, smooth layer of fat which is uniformly distributed over the body.

Quality in the live slaughter animal refers to the refinement of hair, hide, and bone and to the smoothness and symmetry of the body. Quality is also closely associated with carcass yield and the proportion of meat to bone. A high degree of quality in slaughter cattle is denoted by smoothness of fleshing, relatively small bones, neat joints, neatly laid in shoulders and hips, refined hair and thin pliable hide.

The degree of maturity of slaughter cattle is appraised on the basis of the physical characteristics indicating age. Youthfulness and fatness of the slaughter animal are each credited with having a desirable effect on the palatability of meat. Therefore, within certain limits, the standards for slaughter cattle allow an increase in finish to compensate for advancing degrees of maturity.

### GENERAL PRINCIPLES

The determination of the carcass grade that the live animal will produce requires the exercising of well regulated judgment. Each animal graded presents a different combination of the grade determining factors. It is not unusual to find an animal of one grade that has some of the characteristics associated with another grade or grades. Therefore, a composite evaluation of the total inherent physical characteristics of the animal is essential for accuracy in determining grade.

Since evidences of maturity in the beef carcass vary among animals of the same approximate age, only general age limitations can be used for descriptive standards for slaughter cattle. Approximate maximum age limitations for steer, heifer, and cow grades follow: Prime—36 months; Choice—42 months; and Good—48 months. There are no age limitations for the Commercial, Utility, Cutter, or Canner grades.

The designation of slaughter cattle grades is usually made by classes. Since the same standard is applied to carcasses from steers, heifers, and cows without class identification, these three classes are also combined in the slaughter cattle grade descriptions. However, bulls and stags are always identified as to class in both carcass and slaughter cattle grading, since meat from these classes is never interchangeable with meat carrying the same grade name from steers, heifers, and cows.

The descriptions of the physical characteristics of the grades of slaughter cattle represent the lower limit of each grade. No attempt is made to describe the numerous combinations of grade factors which may meet the minimum requirements for a particular grade. Descriptions are limited largely to animals considered as typical of the lower limits of the grade.

## SPECIFICATIONS FOR OFFICIAL UNITED STATES STANDARDS FOR GRADES OF SLAUGHTER STEERS, HEIFERS, AND COWS

### PRIME

Only steers and heifers are eligible for the Prime grade. Cattle possessing the minimum qualifications for Prime grade are definitely superior in conformation, quality, and finish. However, individual animals may differ somewhat in appearance because of possible variations in the degree of excellence of the individual grade factors. In conformation, Prime cattle tend to be low set, compact, thickly fleshed, and short of neck and body. They are wide over the back and loin with the width carried out squarely into the rump. The shoulders and hips are neatly laid in and smooth. The twist is deep and full and the rounds thick and plump. There is a pronounced fullness or bulging over the crops, loin, and rump which contributes to a full, smooth, well-rounded appearance. The fat covering is firm. Steers and heifers over 30 months of age have a very thick covering of fat over the crops, back, ribs, loin, and rump. The brisket, rear flanks, and cod or udder are very full and distended. Although the finish is usually evenly distributed and smooth, some cattle may have rolls of fat over the ribs, and patches around the tailhead. Steers and heifers 18 to 30 months of age have a thick fat covering over the back, ribs, loin, and rump. The brisket, rear flanks, and cod or udder have the appearance of being filled and distended with fat. The fat covering tends to be smooth with only slight indications of patchiness. Steers and heifers under 18 months of age may have only a moderately thick but smooth covering of fat which extends over the back, ribs, loin, and rump. The brisket, rear flank, and cod or udder show a marked fullness. Prime cattle exhibit evidences of high quality. The bones tend to be proportionately small, joints smooth, the hide moderately thin and pliable, and the body trim, smooth, and symmetrical. However, some cattle may show slight evidences of coarseness such as heavy bone, thick hide, and uneven distribution of fat.

### CHOICE

Cattle possessing the minimum qualifications for Choice grade may differ considerably in appearance because of the many possible combinations of varying degrees of excellence of the grade factors. In conformation, Choice cattle tend to be moderately low set and compact. They are moderately thick in natural fleshing and are moderately wide over the back and loin. The shoulders and hips are moderately neat and smoothly laid in with only a slight tendency toward prominence in older cattle. The twist and rounds are of moderate depth and plumpness. There is a fullness or bulge distinctly evident over the crops, loin, and rump. The distribution of fat may be slightly uneven, as evidenced by ties, rolls of fat over the loin edge and ribs, and patchiness around the tailhead. Cattle over 30 months of age have a thick covering of fat over the crops, back, ribs, loin, and rump. The brisket, rear flank, and cod or udder are well filled and distended. Cattle 18 to 30 months of age carry a moderately thick fat

covering over the crops, back, loin, rump, and down over the ribs. The brisket, rear flank, and cod or udder show a marked fullness. Cattle under 18 months of age carry a slightly thick fat covering over the top. The brisket, rear flanks, and cod or udder appear moderately full. Choice cattle usually have a moderately refined appearance but some coarseness may be evident in older animals.

#### GOOD

Cattle possessing minimum qualifications for Good grade may differ somewhat in appearance because of the numerous possible combinations of varying degrees of excellence of the grade factors. In conformation, Good cattle tend to be slightly low set and compact. They are slightly thick in natural fleshing and slightly wide over the back and loin. The shoulders and hips are usually moderately neat and smoothly laid in but may appear slightly prominent in older cattle. The twist and rounds are usually moderately deep but may appear slightly flat with very little evidence of plumpness. There is usually a very slight fullness evident over the crops, loin, and rump. The distribution of fat may be somewhat uneven, particularly in older cattle, as evidenced by ties, rolls of fat over the loin edge and ribs, and patchiness about the tailhead. Cattle over 30 months of age carry a slight thick covering of fat and the brisket, rear flanks, and cod or udder show a marked fullness. Good cattle 18 to 30 months of age carry a slightly thin fat covering with some fullness evident in the crops, brisket, flanks, and cod or udder. Cattle under 18 months of age may have somewhat limited finish, which is largely restricted to the back, loin, and upper rib. The brisket, rear flanks, and cod or udder are slightly full. Good cattle are usually moderately smooth, and slightly refined in appearance. Some coarseness may be evident in the relatively older cattle of the Good grade.

#### COMMERCIAL

Cattle possessing the minimum qualifications for Commercial grade may be highly variable in appearance because of the wide range in the possible combinations of age, conformation, finish, and quality. The Commercial grade includes all ages of steers, heifers, and cows. Young cattle in this grade tend to be slightly rangy, upstanding, thin fleshed, narrow through the crops, back and loin, somewhat prominent at the hips, and shallow in the twist and quarter. The loin, rump, and rounds appear flat with no evidence of fullness. Such cattle may show the heavy bone, prominent hips, and shoulders associated with coarseness or they may show the small bones, tight hide, and angularity denoting over-refinement. Cattle which range in age from 30 to 48 months carry a slightly thin covering of fat which is in evidence over the back, loin, and ribs. The brisket, rear flanks, and cod or udder appear only slightly full. Cattle under 30 months of age carry only a thin covering of fat which is largely restricted to the back, loin, and upper rib. Fully mature cattle appear slightly rangy, upstanding, and somewhat thin fleshed. They appear deep through the fore-rib and moderately wide over the back and loin. The hips and shoulders are prominent, and the quarters thin and shallow with no apparent bulge or fullness. Cattle considered as having just reached full maturity carry a slightly thick fat covering over the back, ribs, loin, and rump which increases progressively with increasing age. Considerable patchiness about the tailhead may be evident. The crops, brisket, flanks, and cod, or udder appear slightly full. Mature Commercial cattle tend to be rather coarse and rough with prominent shoulders and hips, slightly coarse bone, and moderately thick, heavy hides.

#### UTILITY

Cattle possessing the minimum requirements for the Utility grade may vary greatly in appearance because of the numerous possible combinations of grade factors and the wide range in age of animals. In conformation, cattle of Utility grade tend to be rangy, upstanding, angular, and thinly fleshed. They are usually narrow through the crops with a slightly sunken or hollowed-out appearance of the loin, rump, and rounds. Shoulders and hips are decidedly prominent. Depth through the fore-rib is much greater than through the rear flank with a resulting low proportion of hindquarter. Mature cattle carry a slightly thick fat covering which may be restricted to the back, loin, and rump. The crops of these cattle are very thin, and the brisket, rear flanks, and cod or udder show

**La Plata. Universidad nacional. Museo.**

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only very slight fullness. Progressively less finish is apparent in younger cattle ranging down to a very thin covering of fat for those under 30 months of age. Utility cattle tend to be of slightly low quality. The bones and joints are usually proportionately large and the hide either thick or tight and inelastic.

#### CUTTER

Cattle possessing minimum qualifications for Cutter grade may vary slightly in appearance because of age and varying combinations of grade factors. They tend to be decidedly inferior in conformation and quality and carry a very small amount of finish. Cutter cattle are very angular and rough in conformation. The fleshing is very thin, the hips and shoulders are very prominent, and the loin and rounds usually present a very sunken or hollowed-out appearance. Fully mature cattle carry only a very thin fat covering while young immature cattle show no indications of any fat covering. Cutter cattle are usually of low quality, appearing quite rough, coarse, and unsymmetrical.

#### CANNER

Cattle of the Canner grade are normally those of advanced age and so extremely thin as to appear emaciated. The typical Canner animal appears extremely angular, long and thin of neck, extremely narrow and shallow bodied. Shoulders and hips are extremely prominent. Cattle of this grade are very thin fleshed and the outline of the bony framework is very evident. The loin, rump, and rounds present an extremely sunken and hollowed-out appearance. The general appearance denotes low quality. The relative proportion of meat to bone is quite low, joints appear large, and the body is extremely angular and unsymmetrical.

### SPECIFICATIONS FOR OFFICIAL UNITED STATES STANDARDS FOR GRADES OF SLAUGHTER BULLS

#### CHOICE

Choice grade represents a very select segment of the class and is composed primarily of bulls that have not reached full maturity. Bulls possessing minimum qualifications for the Choice grade tend to be lowset, compact, blocky individuals that are very wide topped and very thickly fleshed. The neck, shoulders, and rounds show pronounced thickness, yet they present a well-balanced, symmetrical, smooth appearance. While Choice bulls yield a moderately high proportion of loins, ribs, and rounds, the development of the forequarters definitely exceeds that of the hindquarters. Choice bulls have a firm, relatively thick covering of fat which is fairly uniform and smooth. The brisket, rear flank, and twist appear full and plump. The appearance is neat and trim though some coarseness about the head and shoulders may be evident. The hide is pliable and of medium thickness. The bones and joints are moderately refined.

#### GOOD

Good grade bulls include a wide range of ages and numerous combinations of the grade factors. In conformation, bulls meeting minimum qualifications for the Good grade tend to be moderately blocky and compact. They are thickly fleshed with short, thick necks, moderately wide backs and loins, and moderately thick rounds. Young bulls of this grade have only a slightly thick covering of fat. Older bulls carry at least a moderately thick fat covering with noticeable fullness in the brisket, rear flanks, and twist. Bulls of this grade show only moderate refinement. They usually appear somewhat coarse in the shoulders and heavy of bone and have slightly thick hides.

#### COMMERCIAL

Bulls possessing minimum qualifications for Commercial grade are somewhat angular and rangy. They usually lack width and thickness over the top but appear rather thick through the neck, shoulders, and rounds. Yearling bulls have a very thin fat covering and older bulls appear slightly thin. The brisket and rear flanks appear only slightly full. Bulls of the Commercial grade are

usually of rather low quality. They are usually coarse boned, prominent in the shoulders, and lacking generally in body symmetry.

#### UTILITY

Bulls possessing minimum qualifications for Utility grade are usually inferior in conformation and quality and very deficient in finish. Bulls of this grade are upstanding, rangy, narrow topped, and very shallow of twist and round. They are thinly fleshed but appear slightly thick through the shoulders and rounds. Young bulls of this grade are practically devoid of finish, while older bulls have a very thin covering of fat. Exterior fats are confined principally to the back and the region about the tailhead. There is little or no evidence of fat deposits in the brisket or rear flank. Utility bulls are very coarse and rough in appearance, being especially prominent in the shoulders and hips, and lacking decidedly in trimness and body symmetry.

#### CUTTER

Bulls possessing minimum qualifications for Cutter grade are extremely inferior in conformation and quality and practically devoid of finish. They tend to be very upstanding, rangy and angular, thinly fleshed, narrow, and shallow bodied. Shoulders and hips are very prominent and the loin, rump, and round present a rather sunken or hollowed-out appearance. The brisket is usually very wrinkled with no evidence of fullness.

#### CANNER

Typical Canner grade bulls are very angular and rangy and so extremely thin as to appear emaciated. The muscular portions of the body present a sunken or hollowed-out appearance and the outline of the bony framework is very prominent and visible. Bulls of this grade possess an extremely low proportion of meat to bone.

### SPECIFICATIONS FOR OFFICIAL UNITED STATES STANDARDS FOR GRADES OF SLAUGHTER STAGS

#### CHOICE

Stags possessing minimum qualifications for Choice grade tend to be lowset, compact, wide, and deep of body. They are thickly fleshed with pronounced thickness of the neck, shoulders, and rounds. Although yielding a relatively high proportion of ribs, loins, and rounds, the forequarters are decidedly deeper and thicker and show more development than the hindquarters. Choice stags usually show evidence of not being fully mature and carry a firm, relatively thick covering of fat. The brisket, flanks, and cod tend to be full and distended. Stags of this grade are usually smooth in their finish but are of only moderate quality. They show some coarseness about the head and neck, slight prominence of the shoulders, fairly large bones and joints, and moderately thick but pliable hides.

#### GOOD

Stags possessing minimum qualifications for Good grade tend to be moderately compact and thick in appearance. The neck is usually short and very thick and the shoulders wide, somewhat prominent, and thickly fleshed. The back, loin, and rump are only moderately wide and full while the rounds appear thick and plump. Stags of this grade usually are much deeper and heavier through the forequarters than in the hindquarters. Relatively young stags have a slightly thick fat covering, while older stags have at least a moderately thick finish. The fat covering is fairly smooth and extends evenly over the crops, back, and loin but may be slightly thin over the lower rib, rounds, and shoulders. The brisket, flanks, and cods appear moderately full. Stags of this grade appear rather coarse and lacking generally in refinement.

#### COMMERCIAL

Stags possessing minimum qualifications for Commercial grade are usually upstanding, rangy, and narrow. They are very thick through the neck and shoulders. They may be slightly thinly fleshed and the back, loin, and rump may

appear slightly thin and lacking in fullness. The rounds are moderately thick but shallow and lacking in plumpness. Relatively young stags have a thin covering of fat, while older stags have a slightly thick covering and usually show some fullness in the brisket and cod. Stags of this grade are usually rough, with prominent shoulders and heavy forequarters, and are very unsymmetrical in appearance.

#### UTILITY

Stags possessing minimum qualifications for Utility grade are very upstanding, long and shallow of body, and very narrow and uneven over their top. The neck and shoulders are moderately thick, while the back, loin, and rump have a thin, depressed or hollowed-out appearance. The depth of body is much greater through the fore rib than through the rear flank, with a resulting low proportion of hindquarter. The fat covering of Utility stags is thin and confined mostly to the back and loin, with the lower part of the shoulders, ribs, and rounds being practically devoid of finish. The quantity of finish may range from very thin for very young stags to only slightly thick for old mature stags. Utility stags are decidedly rough and coarse in appearance. Coarseness is very evident in the head, neck, shoulders, hips, and heavy bone.

#### CUTTER

Stags possessing minimum qualifications for the Cutter grade are inferior in conformation and quality, and very deficient in finish. They appear very angular and very narrow throughout. They are very thinly fleshed and carry only a very thin to extremely thin covering of fat. The fleshy portions of the body have a sunken or hollowed-out appearance and the shoulders and hips are very prominent. The proportion of ribs, loins, and rounds from Cutter stag carcasses is relatively low.

#### CANNER

Typical Canner grade stags are extremely inferior in conformation and quality and practically devoid of finish. In conformation, they appear extremely angular, rangy, narrow, and shallow. They are extremely thin fleshed, and the outline of the bony framework of the animal's body is evident. Loins and rounds appear very sunken and hollowed-out. The relative proportion of meat to bone is extremely low, joints and bones appear large, and the body is very unsymmetrical.

